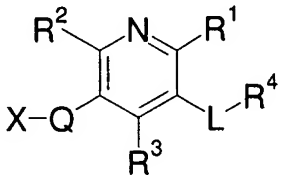
AMENDMENTS TO THE CLAIMS

1 - 21. (Cancelled)

22. (Currently amended) A compound represented by the formula



wherein

R^1 and R^2 are the same or different and each is

a C_{1-10} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a C_{3-10} cycloalkyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkoxy group;

R^3 is a C_{6-14} aryl group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s), a halogen atom, a C_{1-6} alkoxy-carbonyl group, a carboxyl group, a hydroxy group, and a C_{1-6} alkoxy group optionally substituted by 1 to 3 halogen atom(s);

R^4 is an amino group;

L is a C_{1-10} alkylene group;

Q is a bond~~, a C_{1-10} alkylene group or a C_{2-10} alkenylene group~~; and

X is

(2) a cyano group;

(3) (3a) a carboxyl group;

(3b) a carbamoyl group;

(3c) a C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl-carbonyloxy group;

(3d) an aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally

substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group;

(3f) a C_{7-13} aralkyloxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group, a halogen atom, a cyano group, a nitro group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(3g) a carbamoyl group mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom and a C_{1-6} alkoxy group;

(3h) a carbamoyl-C_{1-6} alkyl-carbamoyl group optionally mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s);

(3i) a C_{1-6} alkoxy-carbonyl-C_{1-6} alkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3j) a mono- or di-C_{3-10} cycloalkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3k) a C_{7-13} aralkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a hydroxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl group;

(3l) an aromatic heterocyclyl-C_{1-6} alkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3m) a C_{1-6} alkylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3n) a C_{6-14} arylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a carbamoyl

group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkylsulfonyl group;

(3o) a nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(3p) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3q) a C_{7-13} aralkyl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3r) a non-aromatic heterocyclyloxy-carbonyl group;

(3s) a phosphono group optionally mono- or di-substituted by a C_{1-6} alkyl group;

(3t) an aromatic heterocyclyl-C_{7-13} aralkyloxy-carbonyl group;

(3u) a C_{3-10} cycloalkyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(3v) a C_{6-14} aryl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from an amino group optionally mono- or di-substituted by a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group; or

(3w) an aromatic heterocyclyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4) (4a) a C_{1-6} alkyl-carbonyloxy group;

(4b) a C_{1-10} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(4c) a C_{6-14} aryloxy group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group, a carbamoyl group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group, a C_{1-6} alkylsulfinyl group and a C_{1-6} alkyl group (the C_{1-6}

alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(4d) a 5- or 6-membered aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4e) a fused aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4f) an aromatic heterocyclyl-C_{1-6} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(4g) an aromatic heterocyclyl-C_{6-14} aryloxy group;

(5) (5a) a C_{1-6} alkylthio group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(5b) a C_{6-14} arylthio group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group and a carbamoyl group; or

(5c) a 5- or 6-membered aromatic heterocyclylthio group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6) (6a) an amino group;

(6b) a C_{1-6} alkoxy-carbonyl-C_{1-10} alkylamino group;

(6c) a carboxy-C_{1-10} alkylamino group;

(6d) a C_{7-13} aralkyloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6e) a carbamoylamino group;

(6f) a mono- or di-C_{1-6} alkyl-carbamoylamino group;

(6g) a C_{1-6} alkylsulfonylamino group;

(6h) a C_{6-14} arylsulfonylamino group optionally substituted by a C_{1-6} alkylsulfonyl group;

(6i) an aromatic heterocyclyl-sulfonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6}alkyl group and a mono- or di-(C_{1-6} alkyl-carbonyl)-amino group;

(6j) a mono- or di-(C_{1-6} alkyl-carbonyl)-amino group;

(6k) a C_{3-10} cycloalkyl-carbonylamino group;

(6l) a C_{6-14} aryl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a cyano group, an optionally halogenated C_{1-6} alkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group;

(6m) a C_{7-13} aralkyl-carbonylamino group;

(6n) a C_{8-13} arylalkenyl-carbonylamino group;

(6o) an aromatic heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a C_{6-14} aryl group, a C_{7-13} aralkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6p) a nitrogen-containing heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6q) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonylamino group;

(6r) a tetrahydropyranylcarbonylamino group;

(6s) a 4-oxo-4,5,6,7-tetrahydro-1-benzofuranyl-carbonylamino group;

(6t) a C_{1-6} alkoxy-carbonylamino group optionally substituted by a C_{1-6} alkoxy-carbonyl group;

(6u) a C_{6-14} aryloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6v) a C_{7-13} aralkyl-carbamoylamino group; or

(6w) an aromatic heterocyclyl-carbamoylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(7) (7a) tetrazolyl;

(7b) oxoimidazolidinyl;

(7c) dioxoimidazolidinyl optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7d) oxopiperazinyl;

(7e) dioxopiperazinyl;

(7f) oxodihydrooxadiazolyl;

(7g) dioxoisoindolyl;

(7h) oxazolyl optionally substituted by a C_{1-6} alkoxy-carbonyl group;

(7i) dioxooxazolidinyl or dioxothiazolidinyl, each of which is optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7j) 4-oxo-2-thioxo-1,3-thiazolidin-5-yl or 4-oxo-2-thioxo-1,3-oxazolidin-5-yl, each of which is optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7k) 1,3(2H,5H)-dioxo-tetrahydroimidazo[1,5-a]pyridinyl;

(7l) 1,3(2H,5H)-dioxo-10,10a-dihydroimidazo[1,5-b]isoquinolinyl; or

(7m) a C_{6-14} aryl group optionally substituted by a C_{1-6} alkoxy-carbonyl group;

provided that

when X is an ethoxycarbonyl group, then Q is a C_{1-10} alkylene group or a C_{2-10} alkenylene group

or a salt thereof.

23. (Previously presented) The compound of claim 22, wherein X is

(2) a cyano group;

(3) (3a) a carboxyl group;

(3b) a carbamoyl group;

(3c) a C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl-carbonyloxy group;

(3d) an aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group;

(3f) a C_{7-13} aralkyloxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group, a halogen atom, a cyano group, a nitro group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(3g) a carbamoyl group mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom and a C_{1-6} alkoxy group;

(3h) a carbamoyl-C_{1-6} alkyl-carbamoyl group optionally mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s);

(3i) a C_{1-6} alkoxy-carbonyl-C_{1-6} alkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3j) a mono- or di-C_{3-10} cycloalkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3k) a C_{7-13} aralkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a hydroxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl group;

(3l) an aromatic heterocyclyl-C_{1-6} alkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3m) a C_{1-6} alkylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3n) a C_{6-14} arylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkylsulfonyl group;

(3o) a nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(3p) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3q) a C_{7-13} aralkyl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3r) a non-aromatic heterocyclyloxy-carbonyl group;

(3s) a phosphono group optionally mono- or di-substituted by a C_{1-6} alkyl group;

(3t) an aromatic heterocyclyl-C_{7-13} aralkyloxy-carbonyl group;

(3u) a C_{3-10} cycloalkyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(3v) a C_{6-14} aryl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from an amino group optionally mono- or di-substituted by a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group; or

(3w) an aromatic heterocyclyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4) (4a) a C_{1-6} alkyl-carbonyloxy group;

(4b) a C_{1-10} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(4c) a C_{6-14} aryloxy group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group, a carbamoyl group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group, a C_{1-6} alkylsulfinyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(4d) a 5- or 6-membered aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4e) a fused aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4f) an aromatic heterocyclyl-C_{1-6} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(4g) an aromatic heterocyclyl-C_{6-14} aryloxy group;

(5) (5a) a C_{1-6} alkylthio group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(5b) a C_{6-14} arylthio group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group and a carbamoyl group; or

(5c) a 5- or 6-membered aromatic heterocyclylthio group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(7) (7a) tetrazolyl;

(7b) oxoimidazolidinyl;

(7c) dioxoimidazolidinyl optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7d) oxopiperazinyl;

(7e) dioxopiperazinyl;

(7f) oxodihydrooxadiazolyl;

(7g) dioxoisoindolyl;

(7h) oxazolyl optionally substituted by a C_{1-6} alkoxy-carbonyl group;

(7i) dioxooxazolidinyl or dioxothiazolidinyl, each of which is optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7j) 4-oxo-2-thioxo-1,3-thiazolidin-5-yl or 4-oxo-2-thioxo-1,3-oxazolidin-5-yl, each of which is optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7k) 1,3(2H,5H)-dioxo-tetrahydroimidazo[1,5-a]pyridinyl;

(7l) 1,3(2H,5H)-dioxo-10,10a-dihydroimidazo[1,5-b]isoquinolinyl; or

(7m) a C_{6-14} aryl group optionally substituted by a C_{1-6} alkoxy-carbonyl group.

24. (Cancelled)

25. (Currently amended) The compound of claim 22, wherein $R3^3$ is a ~~C6-14~~ C_{6-14} aryl group optionally substituted by 1 to 3 substituent(s) selected from a ~~C1-6~~ C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s) and a halogen atom.

26. (Cancelled)

27. (Previously presented) The compound of claim 22, wherein X is

(3) (3a) a carboxyl group;

(3b) a carbamoyl group;

(3c) a C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl-carbonyloxy group;

(3d) an aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group;

(3f) a C_{7-13} aralkyloxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group, a halogen atom, a cyano group, a nitro group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(3g) a carbamoyl group mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom and a C_{1-6} alkoxy group;

(3h) a carbamoyl-C_{1-6} alkyl-carbamoyl group optionally mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s);

(3i) a C_{1-6} alkoxy-carbonyl-C_{1-6} alkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3j) a mono- or di-C_{3-10} cycloalkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3k) a C_{7-13} aralkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a hydroxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl group;

(3l) an aromatic heterocyclyl-C_{1-6} alkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3m) a C_{1-6} alkylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3n) a C_{6-14} arylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkylsulfonyl group;

(3o) a nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(3p) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3q) a C_{7-13} aralkyl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3r) a non-aromatic heterocyclyloxy-carbonyl group;

(3s) a phosphono group optionally mono- or di-substituted by a C_{1-6} alkyl group;

(3t) an aromatic heterocyclyl-C_{7-13} aralkyloxy-carbonyl group;

(3u) a C_{3-10} cycloalkyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(3v) a C_{6-14} aryl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from an amino group optionally mono- or di-substituted by a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group; or

(3w) an aromatic heterocyclyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4) (4a) a C_{1-6} alkyl-carbonyloxy group;

(4b) a C_{1-10} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(4c) a C_{6-14} aryloxy group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group, a carbamoyl group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group, a C_{1-6} alkylsulfinyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(4d) a 5- or 6-membered aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4e) a fused aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4f) an aromatic heterocyclyl-C_{1-6} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(4g) an aromatic heterocyclyl-C_{6-14} aryloxy group;

(5) (5a) a C_{1-6} alkylthio group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(5b) a C_{6-14} arylthio group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group and a carbamoyl group; or

(5c) a 5- or 6-membered aromatic heterocyclylthio group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(6) (6a) an amino group;

(6b) a C_{1-6} alkoxy-carbonyl-C_{1-10} alkylamino group;

(6c) a carboxy-C_{1-10} alkylamino group;

(6d) a C_{7-13} aralkyloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6e) a carbamoylamino group;

(6f) a mono- or di-C_{1-6} alkyl-carbamoylamino group;

(6g) a C_{1-6} alkylsulfonylamino group;

(6h) a C_{6-14} arylsulfonylamino group optionally substituted by a C_{1-6} alkylsulfonyl group;

(6i) an aromatic heterocyclyl-sulfonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6}alkyl group and a mono- or di-(C_{1-6} alkyl-carbonyl)-amino group;

(6j) a mono- or di-(C_{1-6} alkyl-carbonyl)-amino group;

(6k) a C_{3-10} cycloalkyl-carbonylamino group;

(6l) a C_{6-14} aryl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a cyano group, an optionally halogenated C_{1-6} alkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group;

(6m) a C_{7-13} aralkyl-carbonylamino group;

(6n) a C_{8-13} arylalkenyl-carbonylamino group;

(6o) an aromatic heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a C_{6-14} aryl group, a C_{7-13} aralkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6p) a nitrogen-containing heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl

group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6q) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonylamino group;

(6r) a tetrahydropyranylcarbonylamino group;

(6s) a 4-oxo-4,5,6,7-tetrahydro-1-benzofuranyl-carbonylamino group;

(6t) a C_{1-6} alkoxy-carbonylamino group optionally substituted by a C_{1-6} alkoxy-carbonyl group;

(6u) a C_{6-14} aryloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6v) a C_{7-13} aralkyl-carbamoylamino group; or

(6w) an aromatic heterocyclyl-carbamoylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group.

28. (Previously presented) The compound of claim 22, wherein X is a carboxyl group.

29. (Previously presented) The compound of claim 22, which is 5-(aminomethyl)-2-methyl-4-(4-methylphenyl)-6-neopentylnicotinic acid;
5-(aminomethyl)-6-isobutyl-2-methyl-4-(4-methylphenyl)nicotinic acid;
methyl 3-{[5-(aminomethyl)-6-isobutyl-2-methyl-4-(4-methylphenyl)pyridin-3-yl]methoxy}-1-methyl-1H-pyrazole-4-carboxylate;
{[2-isobutyl-6-methyl-4-(4-methylphenyl)-5-(2-morpholin-4-yl-2-oxoethyl)pyridin-3-yl]methyl}amine;
methyl 3-({[5-(aminomethyl)-6-isobutyl-2-methyl-4-(4-methylphenyl)pyridin-3-yl]acetyl}amino)benzoate;
N-[5-(aminomethyl)-6-isobutyl-2-methyl-4-(4-methylphenyl)pyridin-3-yl]isoxazole-4-carboxamide,
or a salt thereof.

30. (Previously presented) A pharmaceutical agent comprising a compound of claim 22 or a salt thereof.

31. (Currently amended) The pharmaceutical agent of claim 30, which is an agent for the treatment of the impaired glucose tolerance or obesity.

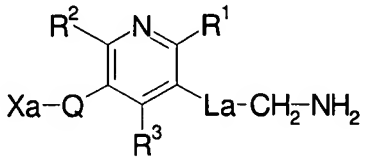
32. (Previously presented) A peptidase inhibitor comprising a compound of claim 22 or a salt thereof.

33. (Previously presented) The inhibitor of claim 32, wherein the peptidase is dipeptidyl dipeptidase-IV.

34. (Withdrawn) A method for the treatment of impaired glucose tolerance or obesity in a mammal, which comprises administering a compound of claim 22 or a salt thereof to the mammal.

35. (Withdrawn) A method of inhibiting peptidase in a mammal, which comprises administering a compound of claim 22 or a salt thereof to the mammal.

36. (Previously presented) A production method of a compound represented by the formula



(I-a)

wherein
R^1, R^2, R^3 and Q are as defined in claim 22;
La is a bond or a C_{1-9} alkylene group; and
Xa is

(3) (3a) a carboxyl group;
(3b) a carbamoyl group;
(3c) a C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3

substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl-carbonyloxy group;

(3d) an aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group;

(3f) a C_{7-13} aralkyloxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group, a halogen atom, a cyano group, a nitro group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(3g) a carbamoyl group mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom and a C_{1-6} alkoxy group;

(3h) a carbamoyl-C_{1-6} alkyl-carbamoyl group optionally mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s);

(3i) a C_{1-6} alkoxy-carbonyl-C_{1-6} alkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3j) a mono- or di-C_{3-10} cycloalkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3k) a C_{7-13} aralkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a hydroxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl group;

(3l) an aromatic heterocyclyl-C_{1-6} alkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3m) a C_{1-6} alkylsulfonyl group optionally substituted by 1 to 3

substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3n) a C_{6-14} arylsulfonyl group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkylsulfonyl group;

(3o) a nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(3p) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3q) a C_{7-13} aralkyl-nitrogen-containing heterocyclyl-carbonyl group optionally substituted by 1 to 3 halogen atom(s);

(3r) a non-aromatic heterocyclyloxy-carbonyl group;

(3s) a phosphono group optionally mono- or di-substituted by a C_{1-6} alkyl group;

(3t) an aromatic heterocyclyl-C_{7-13} aralkyloxy-carbonyl group;

(3u) a C_{3-10} cycloalkyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(3v) a C_{6-14} aryl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from an amino group optionally mono- or di-substituted by a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group; or

(3w) an aromatic heterocyclyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4) (4a) a C_{1-6} alkyl-carbonyloxy group;

(4b) a C_{1-10} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(4c) a C_{6-14} aryloxy group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group, a carbamoyl group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group, a C_{1-6} alkylsulfinyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(4d) a 5- or 6-membered aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4e) a fused aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(4f) an aromatic heterocyclyl-C_{1-6} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(4g) an aromatic heterocyclyl-C_{6-14} aryloxy group;

(5) (5a) a C_{1-6} alkylthio group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(5b) a C_{6-14} arylthio group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group and a carbamoyl group; or

(5c) a 5- or 6-membered aromatic heterocyclylthio group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6) (6a) an amino group;

(6b) a C_{1-6} alkoxy-carbonyl-C_{1-10} alkylamino group;

(6c) a carboxy-C_{1-10} alkylamino group;

(6d) a C_{7-13} aralkyloxy-carbonylamino group optionally substituted by 1 to

3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6e) a carbamoylamino group;

(6f) a mono- or di-C_{1-6} alkyl-carbamoylamino group;

(6g) a C_{1-6} alkylsulfonylamino group;

(6h) a C_{6-14} arylsulfonylamino group optionally substituted by a C_{1-6} alkylsulfonyl group;

(6i) an aromatic heterocyclyl-sulfonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6}alkyl group and a mono- or di-(C_{1-6} alkyl-carbonyl)-amino group;

(6j) a mono- or di-(C_{1-6} alkyl-carbonyl)-amino group;

(6k) a C_{3-10} cycloalkyl-carbonylamino group;

(6l) a C_{6-14} aryl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a cyano group, an optionally halogenated C_{1-6} alkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group;

(6m) a C_{7-13} aralkyl-carbonylamino group;

(6n) a C_{8-13} arylalkenyl-carbonylamino group;

(6o) an aromatic heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a C_{6-14} aryl group, a C_{7-13} aralkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6p) a nitrogen-containing heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6q) a C_{6-14} aryl-nitrogen-containing heterocyclyl-carbonylamino group;

(6r) a tetrahydropyranylcarbonylamino group;

(6s) a 4-oxo-4,5,6,7-tetrahydro-1-benzofuranyl-carbonylamino group;

(6t) a C_{1-6} alkoxy-carbonylamino group optionally substituted by a C_{1-6} alkoxy-carbonyl group;

(6u) a C_{6-14} aryloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6v) a C_{7-13} aralkyl-carbamoylamino group; or

(6w) an aromatic heterocyclyl-carbamoylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(7) (7a) tetrazolyl;

(7b) oxoimidazolidinyl;

(7c) dioxoimidazolidinyl optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7d) oxopiperazinyl;

(7e) dioxopiperazinyl;

(7f) oxodihydrooxadiazolyl;

(7g) dioxoisoindolyl;

(7h) oxazolyl optionally substituted by a C_{1-6} alkoxy-carbonyl group;

(7i) dioxooxazolidinyl or dioxothiazolidinyl, each of which is optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

(7j) 4-oxo-2-thioxo-1,3-thiazolidin-5-yl or 4-oxo-2-thioxo-1,3-oxazolidin-5-yl, each of which is optionally substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group and a C_{1-6} alkoxy-carbonyl group;

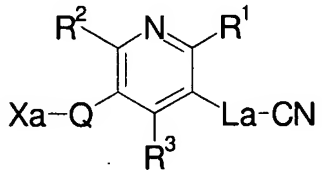
(7k) 1,3(2H,5H)-dioxo-tetrahydroimidazo[1,5-a]pyridinyl;

(7l) 1,3(2H,5H)-dioxo-10,10a-dihydroimidazo[1,5-b]isoquinolinyl; or

(7m) a C_{6-14} aryl group optionally substituted by a C_{1-6} alkoxy-carbonyl group;

or a salt thereof, which comprises subjecting a compound represented by the

formula



(II)

wherein each symbol is as defined above, or a salt thereof to a reduction reaction.

37. (Previously presented) The compound of claim 22, wherein R^3 is a phenyl group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s) and a halogen atom.

38. (Previously presented) The compound of claim 22, wherein X is

(3) (3a) a carboxyl group;

(3b) a carbamoyl group;

(3c) a C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl-carbonyloxy group;

(3d) an aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group;

(3g) a carbamoyl group mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom and a C_{1-6} alkoxy group;

(3h) a carbamoyl-C_{1-6} alkyl-carbamoyl group optionally mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s);

(3i) a C_{1-6} alkoxy-carbonyl-C_{1-6} alkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3j) a mono- or di-C_{3-10} cycloalkyl-carbamoyl group optionally substituted by a C_{1-}

$_6$ alkyl group;

(3k) a C_{7-13} aralkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a hydroxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl group;

(3l) an aromatic heterocyclyl-C_{1-6} alkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3r) a non-aromatic heterocyclyloxy-carbonyl group;

(4) (4b) a C_{1-10} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(4c) a C_{6-14} aryloxy group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group, a carbamoyl group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group, a C_{1-6} alkylsulfinyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group);

(4d) a 5- or 6-membered aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6) (6d) a C_{7-13} aralkyloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6l) a C_{6-14} aryl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a cyano group, an optionally halogenated C_{1-6} alkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group;

(6o) an aromatic heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a C_{6-14} aryl group, a C_{7-13} aralkyl group,

a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(6p) a nitrogen-containing heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group.

39. (Previously presented) The compound of claim 22, wherein X is

(3) (3a) a carboxyl group;

(3b) a carbamoyl group;

(3c) a C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group, a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl-carbonyloxy group;

(3d) an aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group, a thiocarbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group;

(3g) a carbamoyl group mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom and a C_{1-6} alkoxy group;

(3h) a carbamoyl-C_{1-6} alkyl-carbamoyl group optionally mono- or di-substituted by a C_{1-6} alkyl group optionally substituted by 1 to 3 halogen atom(s);

(3i) a C_{1-6} alkoxy-carbonyl-C_{1-6} alkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3j) a mono- or di-C_{3-10} cycloalkyl-carbamoyl group optionally substituted by a C_{1-6} alkyl group;

(3k) a C_{7-13} aralkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a hydroxy group, a carboxyl group,

a C_{1-6} alkoxy-carbonyl group and a C_{1-6} alkyl group;

(3l) an aromatic heterocyclyl-C_{1-6} alkyl-carbamoyl group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group; or

(3r) a non-aromatic heterocyclyloxy-carbonyl group.

40. (Previously presented) The compound of claim 22, wherein X is

(3) (3a) a carboxyl group;

(3e) a non-aromatic heterocyclyl-C_{1-6} alkoxy-carbonyl group optionally substituted by a C_{1-6} alkyl group; or

(3r) a non-aromatic heterocyclyloxy-carbonyl group.

41. (Previously presented) The compound of claim 22, wherein X is

(4) (4b) a C_{1-10} alkoxy group optionally substituted by 1 to 3 substituent(s) selected from a hydroxy group, a carboxyl group, a carbamoyl group and a C_{1-6} alkoxy-carbonyl group;

(4c) a C_{6-14} aryloxy group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, a C_{1-6} alkylthio group, a carbamoyl group, a C_{1-6} alkoxy group, a C_{1-6} alkylsulfonyl group, a C_{1-6} alkylsulfinyl group and a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group); or

(4d) a 5- or 6-membered aromatic heterocyclyloxy group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group (the C_{1-6} alkyl group is optionally substituted by 1 or 2 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group.

42. (Previously presented) The compound of claim 22, wherein X is

(6) (6d) a C_{7-13} aralkyloxy-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group;

(6l) a C_{6-14} aryl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a halogen atom, a cyano group, an optionally halogenated C_{1-6} alkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group, an aromatic heterocyclic group, a non-aromatic heterocyclic group and a carbamoyl group;

(6o) an aromatic heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a C_{1-6} alkyl group, a C_{6-14} aryl group, a C_{7-13} aralkyl group, a C_{1-6} alkoxy group, a carboxyl group, a C_{1-6} alkoxy-carbonyl group and a carbamoyl group; or

(6p) a nitrogen-containing heterocyclyl-carbonylamino group optionally substituted by 1 to 3 substituent(s) selected from a c_{1-6} alkyl group (the c_{1-6} alkyl group is optionally substituted by 1 to 3 substituent(s) selected from a carboxyl group, a c_{1-6} alkoxy-carbonyl group and a carbamoyl group), a carboxyl group, a c_{1-6} alkoxy-carbonyl group and a carbamoyl group.